REMARKS

In accordance with the foregoing, claims 1, 4-8, 11-14, 33 and 43-44 are pending and under consideration.

Claims 1, 5, 11, 43 and 44 are the independent claims.

Claims 43 and 44 have been newly added.

No new matter is believed to have been added.

I. REJECTION UNDER 35 USC §102(b).

Claims 1, 4-8, 11-14 and 33 are rejected under 35 USC§ 102(b) as being anticipated by Kobayashi (US Pat. No. 6,097,695, "Kobayashi").

Applicants respectfully traverse this rejection.

Kobayashi discloses an optical disk, which has a groove on the recording surface containing address data. The groove is formed by phase modulating a first signal and then frequency modulating the phase modulated first signal. (See Kobayashi Abstract, col. 2, lines 2-17). After biphase modulation of the wobble data ADIP, a phase modulated signal having a single frequency is output as the wobble signal WB. Kobayashi discloses extracting "edge" information of the wobble signal WB. (See Kobayashi col. 10, lines 25-31). The edge information that Kobayashi refers to is the transitions between a zero and one in binary. Note that the "edges" discussed in Kobayashi do not refer to the shape of the waveform, but rather refer to point boundaries between transitions between 0 and 1. The two signals in Kobayashi have the same shape to the waveforms.

However, there is no teaching in Kobayashi that the single frequency wobble signal WB contains first and second signal components having different *edge* **waveforms**. As is clearly shown in FIGs. 3A-3F and 4C, the "edge" information in Kobayashi refers to a transition from a bit value of zero to a bit value of one, which is extracted using waveforms having opposite phases but the **same edge waveforms**. The "edge waveforms" for both the signals in Kobayashi are a sine wave. The Examiner points to FIG. 4C as illustrating the different edges of each waveform. However, this misconstrues the claim language in the subject application and the teachings of Kobayashi. The edge waveforms in Kobayashi are each sinusoidal. The "edges" are simply a single point of transition. The claims do not recite an "*edge of a waveform,*"

rather the claims of the present invention recite "*edge waveforms*."

The *phase modulation* (i.e., not edge modulation) exhibited at the transitions between ones and zeros results in the different *phase* waveforms meeting and indicating the transition. However, assuming the waveform in between the first dashed line of FIG. 4C is taken as the first signal and the waveform immediately after the first dashed line is taken as the second signal, while the first and second signal waveforms are out of phase, the "edge waveforms," not "edges," are identical (i.e., sinusoidal).

In contrast, claim 1 recites, inter alia, "a wobble signal recorded on the wobbled track is a single-frequency signal having edge-modulated first header information, wherein the edge-modulated first header information is based on first and second signals having a same frequency but different *edge* **waveforms**."

Claim 5 recites "a wobble signal generator generating a single-frequency wobble signal having header information which is **edge-modulated** based on first and second carrier signals having a same frequency and different *edge* **waveforms**."

Claim 11 recites "generating first and second carrier signals having a same frequency and different *edge* **waveforms**."

Applicants respectfully submit that Kobayashi does not teach or suggest at least the aforementioned features of independent claims 1, 5 and 11. The phrase "edge waveforms" is not two separate words to be considered independently. The waveforms recited in the claims have different shapes or edges to the waveforms.

In view of the foregoing, Applicants respectfully submit that the independent claims patentably define the present invention over the citation of record. Further, the dependent claims should also be allowable for the same reasons as its respective base claim and further due to the additional features that they recite. All rejections are respectfully traversed.

II. NEW CLAIMS.

Newly added claims 45 and 44 recite a first signal having the single-frequency with a first waveform shape and a second signal having the single-frequency with a second waveform shape. Kobayashi does not teach or suggest that the two waveforms with the same frequency have different shapes or edges to the waveforms.

Accordingly, Applicants respectfully submit that the independent claims patentably define the present invention over the citation of record.

III. CONCLUSION.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Applicants believe that the present Amendment is responsive to each of the points raised by the Examiner in the Official Action. However, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

STEIN, MCEWEN & BUI, LLP

Date: 8/29/2005

By: _____
Steven W. Crabb
Registration No. 46,092

1400 Eye St., NW
Suite 300
Washington, D.C. 20005
Telephone: (202) 216-9505
Facsimile: (202) 216-9510